

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended): A medical needle shield apparatus comprising:
a monolithic needle hub,
a collar extending distally from the needle hub and defining an interior cavity; and
a shield having a proximal end receivable by the [an] interior cavity of the collar in an interlocking engagement and including a plurality of hingedly connected segments, the shield being extensible between a retracted position and an extended position[.];
wherein the interior cavity defines notches that receive tabs formed with the proximal end of the shield to lock the needle hub with the shield.
2. (Canceled)
3. (Canceled)
4. (Original): A medical needle shield apparatus as recited in claim 1, further comprising at least two surfaces which engage to limit rotation of the shield relative to the needle hub.
5. (Previously Presented): A medical needle shield apparatus comprising:
a needle hub having a collar defining an interior cavity, the needle hub supporting a needle having a distal end; and
a shield having a proximal end, and a distal end and a lock disposed therebetween, the proximal end of the shield being receivable within the interior cavity of the collar in an interlocking engagement, the shield being manually extensible from a retracted position to an extended position, such that the distal end of the shield extends in parallel with a longitudinal

axis of the needle, wherein the lock captures a portion of the needle disposed proximal to the distal end of the needle in a configuration to prevent displacement of the shield from the extended position and the distal end of the shield encloses at least a portion of the distal end of the needle.

6. (Original): A medical needle shield apparatus as recited in claim 5, wherein the collar is monolithically formed with the needle hub.

7. (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield includes at least two hinged connected segments.

8. (Original): A medical needle shield apparatus as recited in claim 5, wherein the interior cavity defines notches that receive tabs formed with the proximal end of the shield.

9. (Original): A medical needle shield apparatus as recited in claim 8, wherein the tabs are biased for receipt within the notches.

10. (Canceled)

11. (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield is irreversibly locked in the extended position.

12. (Canceled)

13. (Canceled)

14. (Currently Amended): A medical needle shield apparatus as recited in claim ~~[13]~~ 5, wherein the lock includes a portion configured to flexibly engage the needle and biased to lockably retain the needle.

15. (Currently Amended): A medical needle shield apparatus as recited in claim 5, wherein the ~~[shield includes locking means]~~ lock is configured to lock the shield in the extended

position.

16. (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield includes a linear bearing configured to enclose at least a portion of the distal end of the needle.

17. (Original): A medical needle shield apparatus as recited in claim 16, wherein the linear bearing is hingedly connected to the shield proximal to the distal end of the shield.

18. (Original): A medical needle shield apparatus as recited in claim 16, wherein the linear bearing is configured such that at least a portion of the needle is enclosed by the shield during extension of the shield.

19. (Original): A medical needle shield apparatus as recited in claim 5, wherein the needle hub has a luer fitting configured to attach to a syringe.

20. (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield includes a proximal segment engaging a retention catch formed with the proximal end of the shield to releasably dispose the shield in the retracted position.

21. (Canceled)

22. (Canceled)

23. (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield has an articulating actuator configured to urge the shield towards the extended position.

24. (Canceled):

25. (Original): A medical needle shield apparatus as recited in claim 5, wherein the needle hub includes guide surfaces to facilitate engagement of the shield and the needle hub.

26. (Canceled)

27. (Original): A medical needle shield apparatus as recited in claim 7, wherein the segments are connected via living hinges.

28. (Original): A medical needle shield apparatus as recited in claim 27, wherein the segments include relief portions formed adjacent the living hinges.

29. (Original): A medical needle shield apparatus as recited in claim 28, wherein the relief portions are configured to flex inwardly toward the needle.

30. (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield has a proximal segment including at least one rib.

31. (Original): A medical needle shield apparatus as recited in claim 30, wherein the at least one rib has a transverse orientation.

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

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54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Canceled)

58. (Canceled)

59. (Canceled)

60. (Original): The medical needle shield apparatus according to claim 7, wherein at least one segment includes at least one rib for positioning the needle.

61. (Canceled)

62. (Original): The medical needle shield apparatus according to claim 5, wherein the shield further includes a raised surface for urging the shield to the extended position.

63. (Original): The medical needle shield apparatus according to claim 5, wherein the

needle comprises an open-ended needle.

64. (Original): The medical needle shield apparatus according to claim 5, wherein the needle comprises a double wall needle.

65. (Original): The medical needle shield apparatus according to claim 5, wherein the distal end of the needle includes a bevel aligned in a plane of symmetry with the shield for indicating orientation of the bevel.

66. (Canceled)

67. (Canceled)

68. (Canceled)

69. (Previously Presented) A medical needle shield apparatus comprising:
a needle hub means for supporting a needle having a distal end and having a collar defining an interior cavity; and

a shield means, having a proximal end, a distal end and a lock disposed therebetween, for engaging the interior cavity of the collar of the needle hub means in an interlocking engagement, the shield means being manually extensible between a retracted position and an extended position, such that the distal end of the shield extends in parallel with a longitudinal axis of the needle, wherein the lock captures a portion of the needle disposed proximal to the distal end of the needle in a configuration to prevent displacement of the shield means from the extended position and the distal end of the shield means encloses at least a portion of the distal end of the needle.

70. (Original): A medical needle shield apparatus as recited in claim 69, wherein the shield means includes a locking means for locking the shield means in the extended position.

71. (Original): A medical needle shield apparatus comprising:

a monolithically formed needle hub having a collar defining an interior cavity having notches, the needle hub supporting a needle cannula having a distal end; and

a shield having a proximal end and a distal end, the proximal end of the shield being receivable within the interior cavity of the collar in an interlocking engagement, wherein the shield has tabs biased to project through the notches, the shield including a distal segment and a proximal segment connected via a living hinge, and being extensible between a retracted position and an extended position, the distal segment including a linear bearing configured to slide along the needle cannula during extension of the shield and enclose at least a portion of the needle cannula in the extended position and the proximal segment having a locking means for locking the shield in the extended position, the proximal end of the shield having a retention catch configured to engage the proximal segment for releasably disposing the shield in the retracted position, the proximal segment further including transverse ribs.

72. (Canceled)

73. (Canceled)

74. (Canceled)

75. (Canceled)

76. (Canceled)

77. (Canceled)

78. (Canceled)

79. (Canceled)

80. (Canceled)

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81. (Canceled)

82. (Canceled)

83. (Canceled)

84. (Canceled)

85. (Canceled)

86. (Canceled)

87. (Canceled)

88. (Canceled)

89. (Canceled)

90. (Canceled)

91. (Canceled)

92. (Cancelled)

93. (Cancelled)